DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection Bay Area Branch 690 Walnut Ave.St. 150

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Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017583 Address: 333 Burma Road **Date Inspected:** 13-Oct-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower and OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW tack welding of undetermined weld joints located on PCMK BK004A-023, outer transverse end plate stiffener to underside of deck plate. Welder was identified as 040649. QC was identified as ZPMC CWI Xu Le Feng (QC1). QC1 informed this QA Inspector that he was unable to identify the weld joints because the workers were only fitting and tacking the plates and he had no shop drawing or weld map. Welding variables recorded by QC1 appeared to comply with WPS-B-P-2112.

SMAW tack welding of undetermined weld joints located on PCMK BK004A-021, transverse end plate stiffener to top of deck plate. Welder was identified as 040655. QC was identified as QC1. QC1 informed this QA Inspector that he was unable to identify the weld joints because the workers were only fitting and tacking the plates and he had no shop drawing or weld map. QC1 also informed this QA Inspector that the stiffener plate was identified as a technolog stiffener. Welding variables recorded by QC1 appeared to comply with WPS-B-P-2112.

SMAW repair welding of base metal at various locations identified on ZPMC Weld Repair Report B-WR14886 as drawing number BK4-9A, 9C, 8A, 8C, 10A and BK5-9A, 9C, 8A, 8C, 10A. on weld joints BK004A8-021-061, 063, 065, 070, 076, 078, 080, 082. The reason for the repair was displayed on the report as: base metal gouged. Welders were identified as 040724, 040723. QC was identified as QC1. Welding variables recorded by QC1

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appeared to comply with WPS-345-SMAW-3G(3F)-repair.

Bay 10

This QA Inspector randomly observed no welding related work in progress in Bay 10.

OBG Trial Assembly Area

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

ZPMC personnel were final tightening bolt sets on the deck plate U-rib connections at OBG 10AW/10BW transverse joint, adjacent to panel point 88 using an air operated impact gun. The bolt sets appeared to have been previously marked as snug tight.

ZPMC CWI Liu Hua Jie informed this QA Inspector that no welding related work was being performed in the Trial Assembly Area.

Heavy Dock

This QA Inspector randomly observed the following on the Heavy Dock:

All 4 towers, lift 3 were connected and positioned vertically on a base pedestal at end of the Heavy Dock. All 4 towers, lift 4 were positioned on a base separate pedestal at end of the Heavy Dock. The ZPMC 4000 ton floating crane was moored to the end of the Heavy Dock and rigged to the top of west tower, lift 4. ZPMC installed several temporary bolt sets near the bottom of skin E. When the workers were finished bolting, the 4000 ton floating crane lifted west tower, lift 3 and set it down on skin C in the wood-padded cradle mounted on the Heavy Dock deck. The 4000 ton floating crane then lowered the top of west tower, lift 3 until it was positioned horizontally on stanchions on the deck of the Heavy Dock. The ZPMC 1300 ton floating crane was moored to the Heavy Dock and sitting idle.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer